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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,692	05/14/2001	Junichi Hibino	NAK1-BO16	4065

7590 12/30/2002
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EXAMINER

COLON, GERMAN

ART UNIT PAPER NUMBER

2879

DATE MAILED: 12/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/786,692	HIBINO ET AL.	
	Examiner	Art Unit	
	German Colón	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7, 12-15, 20, 21, 23-29, 31, 35, 36 and 38-90 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-5, 7, 12-15, 20, 21, 23-29, 31, 35, 36, 38-90 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-5, 7, 12-15, 36, 38, 43, 60-69, 72-74, and 78, drawn to “a bond holding member of bond sheet for transferring the bonding agent to parts of the barrier ribs, which solves the problem of equally applying a bonding agent to the upper surface of the barrier ribs”.

Group II, claim(s) 20 and 75, drawn to “laminating a material and a bonding agent, and then removing laminated material in order to form a pattern of barrier ribs, which solves the problem of providing an alternative method of forming the barrier ribs”.

Group III, claim(s) 21 and 23, drawn to “pressing a pattern-forming member onto a material in order to form a pattern of barrier ribs, and forming a bonding agent pattern using a pattern-forming member with the same pattern, which solves the problem of providing corresponding shapes of the upper surface of the barrier ribs and the bonding agent pattern.

Group IV, claim(s) 24-29, 31, 35, 70, 71, 76 and 77, drawn to “an indentation forming process for forming indentations or holes on top of the barrier ribs, and arranging the bonding agent in the indentations or holes, which solves the problem of providing an increased bond strength by increasing the bonding area”.

Group V, claim(s) 39-42 and 79, drawn to “a hardening process for hardening parts of the bonding agent, and removing the parts of the bonding agent that have not been hardened, which solves the problem of avoiding contamination by the bonding outside a predetermined area”.

Group VI, claim(s) 44-52 and 80-86, drawn to “a plurality of pair electrodes covered with a dielectric layer on the first substrate and a plurality of barrier ribs on the second substrate, separated from and extending in a different direction than the electrodes and the dielectric layer, and that the panel is structured such that discharge mainly occurs in parts of the panel separated from the positions where the barrier ribs and the dielectric layer are connected, which solves the problem of effectively separating neighboring discharges and hence avoid noise in the display.

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Group VII, claim(s) 53-58 and 87-90, drawn to “a substance used for the bonding agent having a different melting of softening point than a substance used for the part of the substrate connected to the bonding agent, which solves the problem of avoiding deformation of the display panel when heated during bonding”.

Group VIII, claim(s) 59, drawn to “the bonding agent including a substance which is more difficult to melt than the bonding agent, which solves the problem of reducing bleeding of the bonding agent during bonding”.

The inventions listed as Groups I-VIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The above groups equally do not share any corresponding technical feature because each of the above special features produces a different technical effect and relates to the solution of a different technical problem. The above problems can be solved independently and do not form a linked series in which the solution of one problem depends on first solving the preceding problem. Thus, they are technically independent.

Hence, the following separate inventions or group of inventions are not so linked as to form a single general inventive concept:

Group I:

A display panel manufacturing method, characterized in a bond holding member of bond sheet for transferring the bonding agent to parts of the barrier ribs.

Group II:

A display panel manufacturing method, characterized in laminating a material and a bonding agent, and then removing laminated material in order to form a pattern of barrier ribs.

Group III:

A display panel manufacturing method, characterized in pressing a pattern-forming member onto a material in order to form a pattern of barrier ribs, and forming a bonding agent pattern using a pattern-forming member with the same pattern.

Group IV:

A display panel manufacturing method, characterized in comprising an indentation forming process for forming indentations or holes on top of the barrier ribs, and arranging the bonding agent in the indentations or holes.

Group V:

A display panel manufacturing method, characterized in comprising a hardening process for hardening parts of the bonding agent, and removing the parts of the bonding agent that have not been hardened.

Group VI:

A gas discharge panel, characterized in a plurality of pair electrodes covered with a dielectric layer on the first substrate and a plurality of barrier ribs on the second substrate, separated from and extending in a different direction than the electrodes and the dielectric layer, and that the panel is structured such that discharge mainly occurs in parts of the panel separated from the positions where the barrier ribs and the dielectric layer are connected.

Group VII

A display panel, characterized in that a substance used for the bonding agent having a different melting of softening point than a substance used for the part of the substrate connected to the bonding agent. And

Group VIII:

A display panel, characterized in that the bonding agent including a substance which is more difficult to melt than the bonding agent.

A telephone call was made to Joseph W. Price on December 17, 2002 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to German Colón whose telephone number is 703-305-5987. The examiner can normally be reached on Monday thru Friday, from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 703-305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7382 for regular communications and 703-308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


gc

December 18, 2002


NIMESHKUMAR D. PATEL
SUPERVISORY PATENT EXAMINER
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